

Mr. R K Sethi Chair, CDM Executive Board UNFCCC Secretariat CDMinfo@unfccc.int

11th August 2008

Dear Mr. Sethi,

Re: Request for review for the request for registration for the CDM project activity "SMC WHRB 1&2" (Ref. no. 1702)

SGS has been informed that the request for registration for the proposed CDM project activity "SML WHRB 1&2" (Ref. no. 1702) is under consideration for review because three requests for review have been received from members of the Board.

The requests for review are based on the reasons outlined below. SGS would like to provide an initial response to the issue raised by the requests for review:

Requests for review 1-3, Issue 1:

Further clarification is required how the investment comparison analysis has been validated by the DOE, in particular the appropriateness of comparing : (a) a 16 MW coal based power plant with 95% PLF with the project activity with 66% PLF, and (b) backup power cost for the project activity with no back-up cost for the alternative.

SGS' Response:

(a) The investment comparison analysis has been validated on the basis of levelized cost of generation. The comparison of 16MW coal based power plant having 95% PLF with the project activity having 66% PLF was found appropriate. For the comparison between the coal based power generation scenario and project scenario, we have considered the situation, where in the power requirement would have been met by the coal based power plant of at least the equivalent capacity (i.e. 16 MW), whereas in absence of the Project activity, capacity the total 33 MW CPP would have been based on Coal. Therefore making a comparison of levelized cost of generation from project scenario (i.e. 16 MW WHRB without CDM support) with the 16MW equivalent capacity coal based power plant is more conservative than making comparison with 33 MW coal based power plant. In the Appendix-II at page no. 70 and 71 of PDD the comparison between project scenario with 16 MW and 33 MW both have been given. From which it is evident that the levelized cost of generation from 33 MW coal based captive power plant is much less than 16 MW coal based captive power plant. Hence the most appropriate and most conservative investment comparison analysis for levelized cost of generation is with 16 MW coal based power plant. This was checked from the Chartered Accountant (CA) certificate already provided with request for registration.

Plant load factor is the average capacity utilization (http://en.wikipedia.org/wiki/Plant_Load_Factor) of the power plant, in case of WHRB power generation based on flue gases of DRI kiln; it is totally based on Sponge Iron Plant's capacity utilization. Plant load factor is calculated as percentage of actual electricity generation during a year in proportion to the highest possible designed power generation capacity during the year, for example in any project highest possible power generation can be for 365 days 24 hours and multiplied by installed capacity in MW. As against this if the actual electricity is produced in lower quantum; then this is divided by highest annual quantum to arrive at PLF.

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WHRB PLF was validated on the basis of CA certificate and also checked from UNFCCC website for other WHRB Projects which were verified by the validators of the Other DOE's and these are projects which are already registered with UNFCCC. This was also verified by the letter from an independent consultant which states that the PLF of WHRB is around 65%. This letter is attached with PP response.

In case of Coal based Power plants the PLF was validated from the publicly available date on the websites.

The websites are http://www.projectsmonitor.com/detailnews.asp?newsid=12288 (99.62%),

http://www.ntpc.co.in/cms/index.php?page=Turnaround-Capability (97.69%).

This was also verified by the letter from an independent consultant which states that the PLF of coal based captive power plant is around 95%. This letter is attached with PP response.

(b) The operational fluctuation in WHRB Captive Power Plant may make the total generated power useless for the captive utilization, if a proper synchronized backup power support is not available to make up the supply deficiency due to reduced WHRB generation (fluctuations). This is also required so as to keep the kiln rotational so the temperature is maintained in the sponge iron kiln on which the WHRB project activity depends. Since the generation of power from WHRB can not be regulated like in AFBC. Therefore in order to make the WHRB generated power useable; it requires the backup power support from the grid. Therefore only the cost of assurance to draw power from the grid (minimum demand charges/ contract demand), has been considered as cost of "backup power" in the cost of generation of power, whereas if the actual impact (cost) of importing deficient power is calculated towards the cost of deficient power required to be purchased from the grid then the average cost of power due to WHRB will be still quite higher than considered by PP. Because to make up the 29% PLF deficiency (95% - 66%= 29%), required for smooth captive load operation the power if imported from the grid would cost @Rs.2.90/kWh only towards energy charges as per the tariff order enclosed with PP response (this energy charge does not include the demand charges which is already considered towards the cost of assurance to draw power from the grid as backup power cost), it is therefore evident that more conservative approach is adopted by considering only the cost of assurance to the draw power from the grid as backup power cost.

Since power generation from AFBC can be most comfortably regulated as per the demand and requirement also there is no fluctuation in AFBC power generation hence there is no need to have any backup power from the grid. Also the PLF of coal based power generation is around 95% which was checked from the publicly available documents explained above. Therefore there is no cost considered towards the backup power for coal based power generation made for sake of comparison.

Requests for review 1-3, Issue 2:

The DOE is requested to provide explanation for the delay in submitting the project for validation to show that CDM revenues were considered essential in the decision to invest in the project activity. The response should provide a detailed timeline of project implementation with relevant, preferably third-party evidences.

SGS' Response:

The CDM revenues were considered essential in the decision to invest in the project activity. This was checked from the board minutes dated 18-05-2003 already submitted with request for registration; the effective steps to implement the project activity were started by placing order for waste heat recovery boiler on 09-07-2003 for phase 1. The permission to establish from Pollution Control Board was obtained on 29-01-2004. Cethar Vessels submitted the schedule on 30-07-2004. Phase 1 was implemented and consent to operate was obtained on 17-08-2004. Subsequently the internal team of the company started working on the preparation of required documents for applying for CDM since the investment decision in May 2003. This was checked while interviewing the management during validation. During this period PP was busy in implementation of project and in seeking various clearances from Government agencies and departments. The PP obtained the Industrial Enterpeurership Memorandum (IEM) from Ministry of Commerce and Industries, Govt. of India on 21-10-2005.

After getting the IEM the company approached to the Village local government for issuance of No Objection Certificate (NOC) for the project activity, for which a meeting with Gram Sabha (local village government) was held on 26/01/2006 to appraise about the project activity and for local public consultation and to obtain the NOC. The Village local government issued NOC for the project activity on 27/05/2006. In the mean time when the internal team found it difficult to complete the documents, so PP appointed M/s. Indus Technical and Financial Consultants Ltd. as their CDM consultants on 08/07/2006. The letter of appointment was checked during validation. The consultant demanded all the legal clearances for proceeding in the matter. This was checked while



interviewing the consultant during validation. The PP had applied for obtaining permission to establish (Phase 2) from State Pollution Control Board for the entire capacity of the project which was granted only on 30/12/2006 and this is attached with PP response. PP was also informed by head of internal team that PP can not submit the application for obtaining approval from the Government of India, without having all the clearances from pollution control board and other legal authorities and EIA clearance. It was also informed that without the approval of Government of India i.e. DNA approval PP can not submit the project to UNFCCC as a CDM project.

Chronological History for the Project activity

| 1. | CDM Consideration | 18/05/2003 |
|-----|--|------------|
| 2. | Purchase Order for 8 MW TG | 11/06/2003 |
| 3. | Purchase Order for first WHRB Boiler | 09/07/2003 |
| 4. | Application for seeking permission to establish from State Pollution Control Board | 11/11/2003 |
| 5. | Permission to Establish received from State Pollution Control Board (for first phase) | 29/01/2004 |
| 6. | Billing Schedule submitted by Cethar Vessles and approved by SMC Power Ltd. For 38 tph Boiler (First Boiler) | 30/07/2004 |
| 7. | Consent to Operate received from State Pollution Control Board (for first phase) | 17/08/2004 |
| 8. | Approval of Methodology for WHRB by UNFCCC | 08/07/2005 |
| 9. | IEM from Ministry of Commerce and Industries, Govt. of India | 21/10/2005 |
| 10. | Gram Sabha resolution (26/01/2006) | 26/01/2006 |
| 11. | Application for Permission to Establish to State Pollution Control Board (2nd Phase) | 04/02/2006 |
| 12. | Purchase Order for 25 MW TG | 09/02/2006 |
| 13. | Order for Second WHRB Boiler to Thermal System Hyderabad | 10/02/2006 |
| 14. | Purchase order for AFBC | 27/02/2006 |
| 15. | NOC from Sarpanch | 27/05/2006 |
| 16. | Application for Environment Clearance from Ministry of Environment and Forest | 21/06/2006 |
| 17. | Search for and Appointment of another consultant (Indus Technical & Financial Consultants Limited) | 08/07/2006 |
| 18. | Public Hearing / Local Public Consultation | 12/09/2006 |
| 19. | Application for Host Country Approval | 18/11/2006 |
| 20. | Permission to Establish (2nd Phase) – received from State Pollution Control Board which was required essentially to obtain HCA | 30/12/2006 |
| 21. | Letter from DNA for submission of documents to establish serious CDM consideration, statutory clearances etc. | 11/01/2007 |
| 22. | Validator Appointment | 24/01/2007 |
| 23. | Host Country Approval | 12/03/2007 |
| 24. | Webhosting of PDD for International Stake holders comments | 11/04/2007 |
| 25. | Environment Clearance received | 24/04/2007 |



| 26. | Commissioning of 25 MW Power plant | 23/12/2007 |
|-----|------------------------------------|------------|
| | | |

From the above chronology it was concluded that the total project was conceived in May 2003 and serious CDM consideration was observed at the time of investment decision. The letter dated 11-01-2007 from Indian DNA also mentions that proof (Board Resolution) to the effect that CDM was taken into consideration at the time of inception of the project. This shows that even DNA has taken the note of this that the CDM was considered in May 2003 and after going through these documents submitted by PP. This was accepted and host country approval was issued on 12-03-2007. This was also mentioned in NIR12 of validation report as well. All these are more detailed in revised validation report attached with this response as Annex 1.

Requests for review 1-3, Issue 3:

Further clarification is required on the baseline alternative considered, as the PDD and the validation report do not refer to the same baseline alternative.

SGS' Response:

The baseline alternative was validated as Coal based captive power generation. This was a typo in the report and the validation report has been revised and attached with this response as Annex 1.

We apologize if the initial validation report has been unclear and hope that this letter and the attached information address the concerns of the members of the Board.

Pankaj Mohan (0091 9871794671) will be the contact person for the review process and is available to address questions from the Board during the consideration of the review in case the Executive Board wishes.

Yours sincerely

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Encl:

Annex 1 Revised Validation Report Annex 1a Minutes_BOD_18_05_2003 Annex 1b CTE29_01_2004 Annex 1c NOC_27_05_2006 Annex 1d ITFC Appointment08_07_2006 Annex 1e Letter from DNA for submitting documents Pankaj Mohan Lead Auditor <u>Pankaj.Mohan@sgs.com</u> T: + 91 124 2399990 - 98 M: + 91 9871794671